CMSC 491/691
Knowledge Graphs
Administrivia

Fall 2022

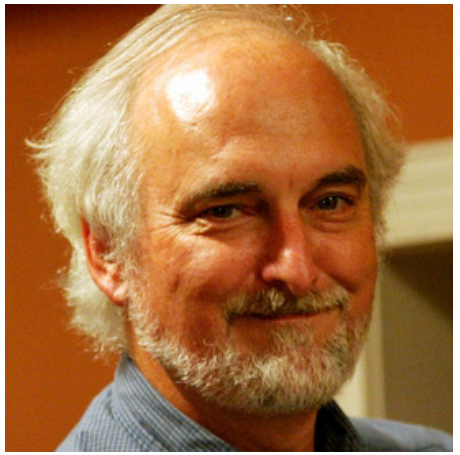
Course Objectives

- Understand concepts, motivation, goals underling knowledge graphs (KGs)
- Gain familiarity with popular property graphs like Neo4j
- In-depth understanding of Semantic Web (SW) languages & tools
- Ability to create & use ontologies & schemas using SW languages
- Familiarity with major usecases, e.g., Wikidata, Dbpedia, Google knowledge graph, schema.org
- Create, consume and manipulate KG data
- Ability to define and implement a KG project

Grading

- Grades will be based on homework, exams, and a project
- 5-6 short **homework** assignments
  - Submissions will be via GitHub classroom
- **Project** (individual or group) with *proposal* and *final report*
- **Midterm,** comprehensive **final,** possible **quizzes** on readings
- Probable weighting: 40% homework, 25% project, 15% midterm, 20% final

Instructor availability



Instructor: Professor Tim Finin

- Pronounced like *fine + in,* not like *fin + in*
- Office: ITE329, finin@umbc.edu
- Office hours: TBD
- Direct general questions (i.e., those other students may also have and a Web search can't answer) to our Discord server first
- We'll try to respond to postings on Discord or private email messages within 24 hours

Programming, etc.

- Homework requires using various systems/tools
- We'll use GitHub Classroom for starter code & submissions
- Some will require programming; some require Python, others can be done in any language (e.g., Java) but Python preferred
- Examples demonstrated in Unix (Linux or MAC OS X); most should also work on Windows
- Installing a web server on your computer may be useful

Web Site: http://bit.ly/691f22